

Kearney/Centaur Division
A.T. Kearney, Inc.
101 Merrimac Street
Boston, Massachusetts 02114
617 720 7400
Facsimile 617 720 7410

Management
Consultants

Superfund Records Center
SITE: Ciba-Geigy
BREAK: 19.00 JY
OTHER: 638076

RZ1-R01029.01-EP-017

ATKEARNEY

July 30, 1996

Ms. Rosanne Sawaya-O'Brien
Deputy Regional Project Officer
U.S. EPA New England
Waste Management Division (HPC CAN-7)
JFK Federal Building
Boston, MA 02203

SWMU 5 LAST
SOIL REMOVAL.
NON-DETECT
@ .1 PPM PCB'S

Reference: EPA Contract No. 68-W4-0013; EPA Work Assignment No.
R01029: Ciba-Geigy; Technical Review of Documents; Results
of PCB Sampling Analysis from the Warwick Area

Dear Ms. Sawaya-O'Brien:

Enclosed please find the complete analytical results, including a case narrative and analytical report, for PCB analyses conducted on two soil split samples from the above referenced site collected on July 10, 1996. The sampling event was conducted as part of the post excavation/removal implemented at the River Sediment Storage Area or Warwick Area (SWMU 5).

If you have any questions please contact me or the A.T. Kearney Work Assignment Manager, Ms. Lori Mix at 617/720-7460.

Sincerely,


Mark D. Heaney
Regional Manager

cc: F. Battaglia, EPA New England
W. Jordan/Central Files
L. Mix
ATK Boston Files



SEMS DocID

638076



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED: 12-July-1996

REPORT NUMBER: D96-7638

REPORT DATE: 19-July-1996

SAMPLE SUBMITTED BY : A.T. Kearney
ADDRESS : 101 Merrimac St.
Boston, MA 02114
ATTENTION : Mr. Lori Mix
PROJECT : CIBA-GEIGY Cranston, R.I.
DATE SAMPLED : 10-July-1996

CASE NARRATIVE COMMENTS:

The standard laboratory detection limit of 0.1 ppm was used in reporting the EPA 8080 PCB analytical results. A requested detection limit of 1.0 ppm was noted on the chain of custody. However, the standard practice of this laboratory is to utilize the lowest detection limit possible when reporting data.

No problems were encountered during the sample analysis of this job.

If you have any questions, please call Ms. Janice McKittrick at (214) 238-5591.

Amy Pence
Data\QC Review



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ANALYTICAL REPORT

DATE RECEIVED : 12-JUL-1996

REPORT NUMBER : D96-7638

REPORT DATE : 19-JUL-1996

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Included in this data package are the analytical results for the sample group which you have submitted to Inchcape Testing Services for analysis. These results are representative of the samples as received by the laboratory.

The information contained herein has undergone extensive review and is deemed accurate and complete. Sample analysis and quality control were performed in accordance with all applicable protocols. Any deviations from these protocols or observations of interest are detailed in an accompanying Case Narrative. Please refrain from reproducing this report except in its entirety.

If you have any questions regarding this report and its associated materials please call your Project Manager at (214) 238-5591.

We appreciate the opportunity to serve you and look forward to providing continued service in the future.

Martin Jeffus
General Manager



Inchcape Testing Services
Environmental Laboratories

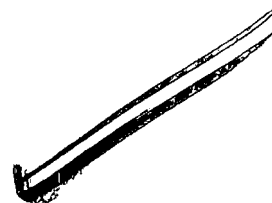
DATE RECEIVED : 12-JUL-1996

REPORT NUMBER : D96-7638-1

REPORT DATE : 19-JUL-1996

SAMPLE SUBMITTED BY : A.T. Kearney
ADDRESS : 101 Merrimac St.
: Boston, MA 02114
ATTENTION : Mr. Lori Mix

SAMPLE MATRIX : Soil
ID MARKS : CFW9OBSC-Bottom Split
: Composite
PROJECT : CIBA-GEIGY Cranston, R.I
DATE SAMPLED : 10-JUL-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 15-JUL-1996
ANALYSIS METHOD : EPA 8080 /1
ANALYZED BY : CDR
ANALYZED ON : 19-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AB815-86



POLYCHLORINATED BIPHENYLS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Aroclor 1016	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1221	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1232	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1242	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1248	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1254	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1260	0.100 mg/Kg	< 0.100 mg/Kg



REPORT NUMBER : D96-7638-1
ANALYSIS METHOD : EPA 8080 /1

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QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Decachlorobiphenyl (SS)	0.33 mg/Kg	84.2 %
2,4,5,6-Tetrachloro-m-xylene (SS)	0.33 mg/Kg	76.6 %



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ADDRESS : 101 Merrimac St.
: Boston, MA 02114
ATTENTION : Mr. Lori Mix

SAMPLE MATRIX : Soil
ID MARKS : CFW9OBSC-Bottom Split
: Composite
PROJECT : CIBA-GEIGY Cranston, R.I
DATE SAMPLED : 10-JUL-1996

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Solids /1	0.01 %	82.3 %
Analyzed using ASTM D2216 mod. on 18-JUL-1996 by SAB QC Batch No : 804056F		



Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 12-JUL-1996

REPORT NUMBER : D96-7638-2

REPORT DATE : 19-JUL-1996

SAMPLE SUBMITTED BY : A.T. Kearney
ADDRESS : 101 Merrimac St.
: Boston, MA 02114
ATTENTION : Mr. Lori Mix

SAMPLE MATRIX : Soil
ID MARKS : Fill Composite-1
PROJECT : CIBA-GEIGY Cranston, R.I
DATE SAMPLED : 10-JUL-1996
PREPARATION METHOD : EPA 3550A
PREPARED BY : PSS
PREPARED ON : 15-JUL-1996
ANALYSIS METHOD : EPA 8080 /1
ANALYZED BY : CDR
ANALYZED ON : 18-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 1
QC BATCH NO : AB815-86

POLYCHLORINATED BIPHENYLS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Aroclor 1016	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1221	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1232	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1242	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1248	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1254	0.100 mg/Kg	< 0.100 mg/Kg
Aroclor 1260	0.100 mg/Kg	< 0.100 mg/Kg

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Decachlorobiphenyl (SS)	0.33 mg/Kg	82.8 %
2,4,5,6-Tetrachloro-m-xylene (SS)	0.33 mg/Kg	87.6 %



Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 12-JUL-1996

REPORT NUMBER : D96-7638-2

REPORT DATE : 19-JUL-1996

SAMPLE SUBMITTED BY : A.T. Kearney
ADDRESS : 101 Merrimac St.
: Boston, MA 02114
ATTENTION : Mr. Lori Mix

SAMPLE MATRIX : Soil
ID MARKS : Fill Composite-1
PROJECT : CIBA-GEIGY Cranston, R.I
DATE SAMPLED : 10-JUL-1996

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Solids /1	0.01 %	97.3 %
Analyzed using ASTM D2216 mod. on 18-JUL-1996 by SAB QC Batch No : 804056F		



REPORT DATE : 19-JUL-1996

REPORT NUMBER : D96-7638

SAMPLE SUBMITTED BY : A.T. Kearney
ATTENTION : Mr. Lori Mix
PROJECT : CIBA-GEIGY Cranston, R.I

LABORATORY QUALITY CONTROL REPORT

ANALYTE	Aroclor 1260
BATCH NO.	AB815-86
LCS LOT NO.	AB604-61
PREP METHOD	EPA 3550A
PREPARED BY	PSS
ANALYSIS METHOD	EPA 8080
ANALYZED BY	CDR
UNITS	mg/Kg
METHOD BLANK	< 0.10
SPIKE LEVEL	0.330
MS RESULT	0.280
MS RECOVERY %	84.8
MSD RESULT	0.240
MSD RECOVERY %	72.7
MS/MSD RPD %	15.4
BS RESULT	0.270
BS RECOVERY %	81.8
BSD RESULT	0.280
BSD RECOVERY %	84.8
BS/BSD RPD %	3.64
DUPLICATE RPD %	NA
LCS LEVEL	0.330
LCS RESULT	SEE_BS
LCS RECOVERY %	SEE_BS
SPIKE SAMPLE ID	7581-7
DUP SAMPLE ID	---

SEE_BS
NA

LCS and LCS Duplicate reported as BS and BSD.
Not applicable

[illegible]

1 Matrix	WW - Wastewater	W - Water	S - Soil	SD - Solid	L - Liquid	A - Air Bag	C - Charcoal tube	SL - Sludge	O - Oil
2 Container	VOA - 40 ml vial	A/G - Amber / Or Glass 1 Liter			250 ml - Glass wide mouth		P/O - Plastic or other		

**Inchcape cannot accept verbal changes.
Please Fax written changes to
214-238-5592**

OFFICE USE ONLY

ORIGINAL

COOLER RECEIPT FORM

Date Received: 7-12-96

Project: CEBA-GEIGY Cranston, R.I.

Date Logged-in: 7-12-96

Received by: Colleen McRair

1	Shipping slip. If yes, carrier and bill number: <u>Fedex 3932485944</u>	<input checked="" type="radio"/> Yes	<input type="radio"/> No
2	Custody seals on cooler. If yes, how many and where: <u>1 on front</u>	<input checked="" type="radio"/> Yes	<input type="radio"/> No
3	Custody seals intact.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
4	Chain of Custody in plastic.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
5	Chain of Custody filled out properly.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
6	Client signed Chain of Custody.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
7	Samples shipped on ice. If no, temperature of cooler:	<input checked="" type="radio"/> Yes	<input type="radio"/> No
8	All bottles sealed.	<input type="radio"/> Yes	<input checked="" type="radio"/> No
9	All bottles received intact.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
10	Labels in good condition and complete.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
11	Sample labels agree with Chain of Custody.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
12	Correct containers used.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
13	Correct preservative used.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
14	Sufficient sample provided.	<input checked="" type="radio"/> Yes	<input type="radio"/> No
15	Bubbles absent from VOA. <u>N/A</u>	<input type="radio"/> Yes	<input checked="" type="radio"/> No
16	Comments (use corrective action form if necessary): _____ _____ _____ _____ _____		